

# gtt\_ekn Manual

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# 1 Function Manual

## 1.1 Outline

## 1.2 Notation

## 1.3 Functions

### 1.3.1 gtt\_ekn.nc

`gtt_ekn.nc(beta,p)`

:: It returns the value of the normalizing constant and its derivatives of the conditional hypergeometric distribution of two way contingency tables with fixed marginals

*return*       $[Z, [d_{11} Z, d_{12} Z, \dots], \dots, [d_{m1} Z, d_{m2} Z, \dots, d_{mn} Z]]$

*beta*        List of row sums and column sums. All entries must be positive integer.

*p*            The probabilities of the cells of the table.

- Details have not been written. See Japanese documents.

2x3 contingency table with the row sum [4,5] and the column sum [2,4,3].

```
[2237] gtt_ekn.nc([4,5],[2,4,3],[[1,1/2,1/3],[1,1,1]]);
```

```
[4483/124416,[ 353/7776 1961/15552 185/1728 ]
```

```
[ 553/20736 1261/15552 1001/13824 ]]
```

English translation for other functions has not yet been written.

# Index

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